

WHAT IS CLAIMED IS:

1. A copyright protecting method of scrambling an information signal inputted via an input path and outputting it via an output path,  
5 the information signal corresponding to contents which are protected under copyright, including copy control information, and being scrambled by means of a predetermined type of scramble system, the copyright protecting method comprising:

10 a discriminating step of discriminating the type of the scramble system of the inputted information signal and the type of the copy control information of the inputted information signal; and

15 a scramble system applying step of applying a predetermined scramble system to the inputted information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with that included in a selected condition,

20 wherein the selected condition including combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path.

2. The copyright protecting method according to claim 1, wherein a plurality of the scramble systems include scramble processings each having different algorithms and corresponding descramble processings.

3. The copyright protecting method according to claim 1, wherein a

plurality of the scramble systems include scramble processings each having different keys and corresponding descramble processings.

4. The copyright protecting method according to claim 1, wherein the copy control information includes first control information indicating permission to copy the information signal only once and second control information indicating prohibition of copying the information signal after the information signal is copied once.

5. A recording method of recording an information signal inputted via an input path on the recording medium according to copy control information, the information signal corresponding to contents which are to protected under copyright, the recording method comprising:

a discriminating step of discriminating the type of the scramble system of the inputted information signal and the type of the copy control information of the inputted information signal;

a scramble system applying step of applying a predetermined scramble system to the inputted information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with that included in a selected condition; and

a recording step of recording the scrambled output on the recording medium,

wherein the selected condition including combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to

eliminate copying of the information signal via an unauthorized path.

6. The recording method according to claim 5, wherein the  
scramble system applying step applies a scramble system different from  
5 that of the information signal recorded on a prerecorded disc to the  
inputted information signal when the discriminated type of the copy  
control information of the inputted information signal coincides with  
that of the inputted information signal recorded on the prerecorded disc  
and produces the scrambled output.

7. The recording method according to claim 6, wherein the copy  
control information permits only one copy of the information signal.

8. The recording method according to claim 5, the recording method  
15 further comprising a descramble system applying step of applying a  
predetermined descramble system to the inputted information signal,  
wherein the scramble system applying step applies the  
predetermined scramble system to the inputted information signal after  
the predetermined descramble system is applied.

9. The recording method according to claim 8, wherein the  
predetermined descramble system is restricted to a descramble system  
corresponding to a scramble system which is previously set.

25 10. The recording method according to claim 9, wherein  
the descramble system applying step applies two types of the

predetermined descramble systems to two types of the inputted information signals respectively,

one type of the predetermined descramble system is a scramble system of the information signal to which the copy control information  
5 for permitting only one copy of the information signal outputted from a receiving apparatus is given, and

another type of the predetermined descramble system is a scramble system of the information signal outputted when reproduction is executed from a recording medium to which the copy control  
10 information for permitting only one copy of the information signal is given.

11. The recording method according to claim 5, wherein the scramble system applying step applies only one predetermined scramble  
15 system to the inputted information signal, and the only one predetermined scramble system is a scramble system which is applied to the case where recording information to which copy control information for forbidding copies after the information signal is copied once is given is recorded onto the recording medium.

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12. A recording apparatus for recording an information signal inputted via an input path onto a recording medium according to copy control information, the information signal corresponding to contents which are to be recorded on the recording medium, including copy  
25 control information, and being scrambled by means of a predetermined type of scramble system, the recording apparatus comprising:

a discriminating device for discriminating the type of the scramble system of the inputted information signal and the type of the copy control information of the inputted information signal;

5 a scramble system applying device for applying a predetermined scramble system to the inputted information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with that included in a selected condition; and

10 a recording device for recording the scrambled output onto the recording medium,

wherein the selected condition including combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path.

15 13. The recording apparatus according to claim 12, wherein the scramble system applying device applies a scramble system different from that of the information signal recorded on a prerecorded disc to the inputted information signal when the discriminated type of the copy control information of the inputted information signal coincides with  
20 that of the inputted information signal recorded on the prerecorded disc and produces the scrambled output.

14. The recording apparatus according to claim 13, wherein the copy  
25 control information permits only one copy of the information signal corresponding to the contents.

15. The recording apparatus according to claim 12, the recording apparatus further comprising a descramble system applying device for applying a predetermined descramble system to the inputted  
5 information signal,

wherein the scramble system applying device applies the predetermined scramble system to the inputted information signal after the predetermined descramble system is applied.

10 16. The recording apparatus according to claim 15, wherein the predetermined descramble system is restricted to a descramble system corresponding to a scramble system which is previously set.

15 17. The recording apparatus according to claim 16, wherein the descramble system applying device applies two types of the predetermined descramble systems to two types of the inputted information signals respectively,

one type of the predetermined descramble system is a scramble system of the information signal to which the copy control information  
20 for permitting only one copy of the information signal outputted from a receiving apparatus is given, and

another type of the predetermined descramble system is a scramble system of the information signal outputted when reproduction is executed from a recording medium to which the copy control  
25 information for permitting only one copy of the information signal is given.

18. The recording apparatus according to claim 12, wherein the scramble system applying device applies only one predetermined scramble system to the inputted information signal, and the only one  
5 predetermined scramble system is a scramble system which is applied to the case where recording information to which copy control information for forbidding copies after the information signal is copied once is given is recorded onto the recording medium.

19. A reproducing method of reading an information signal from a recording medium and reproducing it according to copy control information, the information signal corresponding to contents which are protected under copyright, being recorded on the recording medium via an input path, including copy control information, and being scrambled  
15 by means of a predetermined type of scramble system, the reproducing method comprising:

a discriminating step of discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal;

20 a scramble system applying step of applying a predetermined scramble system to the read information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with that included in a selected condition; and

25 a reproducing step of reproducing the scrambled output,  
wherein the selected condition including combinations of a

plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path.

5 20. The reproduction method according to claim 19, wherein different scramble systems are applied to the information signal according to the combinations of the scramble systems of the information signal recorded on the recording medium and the copy control information signals.

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21. The reproduction method according to claim 20, wherein the scramble system applied to the information signal when reproduction is executed from the recording medium to which copy control information for permitting only one copy of the information signal is given, is different from a scramble system, which is applied to the information signal when the reproduction is executed from the recording medium onto which the information signal with copy control information for forbidding copies after the information signal is copied once is recorded, and is also different from the scramble system, which is applied to the information signal with copy control information for permitting only one copy of the information signal outputted from a receiving apparatus.

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22. A reproducing apparatus for reading an information signal from a recording medium and reproducing it according to copy control information, the information signal corresponding to contents which are protected under copyright, being recorded on the recording medium via

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an input path, including copy control information, and being scrambled by means of a predetermined type of scramble system, the reproducing apparatus comprising:

5 a discriminating device for discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal;

10 a scramble system applying device of applying a predetermined scramble system to the read information signal and producing a scrambled output when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information coincides with that included in a selected condition; and

a reproducing device for reproducing the scrambled output,

15 wherein the selected condition including combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path.

20 23. The reproducing apparatus according to claim 22, wherein different scramble systems are applied to the information signal according to the combinations of the scramble systems of the information signal recorded on the recording medium and the copy control information signals.

25 24. The reproduction apparatus according to claim 23, wherein the scramble system applied to the information signal when reproduction is executed from the recording medium to which copy control information

for permitting only one copy of the information signal is given, is different from a scramble system, which is applied to the information signal when the reproduction is executed from the recording medium onto which the information signal with copy control information for forbidding copies after the information signal is copied once is recorded, and is also different from the scramble system, which is applied to the information signal with copy control information for permitting only one copy of the information signal outputted from a receiving apparatus.

25. A reproducing method of reading an information signal from a recording medium and reproducing it according to copy control information, the information signal corresponding to contents which are protected under copyright, being recorded on the recording medium via an input path, including copy control information, and being scrambled by means of a predetermined type of scramble system, the reproducing method comprising:

a discriminating step of discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal; and

a forbidding reproducing step of forbidding reproducing the read information signal when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information does not coincide with that included in a selected condition,

wherein the selected condition including combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to

eliminate copying of the information signal via an unauthorized path.

26. The reproduction method according to claim 25, wherein  
different scramble systems are applied to the information signal  
5 according to combinations of the scramble systems of information signal  
recorded onto the recording medium and the copy control information  
signals.

27. The reproduction method according to claim 26, wherein the  
10 scramble system applied to the information signal when reproduction is  
executed from the recording medium to which copy control information  
for permitting only one copy of the information signal is given, is  
different from a scramble system, which is applied to the information  
signal when the reproduction is executed from the recording medium  
15 onto which the information signal with copy control information for  
forbidding copies after the information signal is copied once is recorded,  
and is also different from the scramble system, which is applied to the  
information signal with copy control information for permitting only one  
copy of the information signal outputted from a receiving apparatus.

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28. A reproducing apparatus for reading an information signal from  
a recording medium and reproducing it according to copy control  
information, the information signal corresponding to contents which are  
protected under copyright, being recorded on the recording medium via  
25 an input path, including copy control information, and being scrambled  
by means of a predetermined type of scramble system, the reproducing

apparatus comprising:

a discriminating device for discriminating the type of the scramble system of the read information signal and the type of the copy control information of the read information signal; and

5 a forbidding reproducing device for forbidding reproducing the read information signal when a combination of the discriminated type of the scramble system and the discriminated type of the copy control information does not coincide with that included in a selected condition,

10 wherein the selected condition including combinations of a plurality of types of scramble systems applicable to the information signal and a plurality of types of the copy control information to eliminate copying of the information signal via an unauthorized path.

29. The reproduction apparatus according to claim 28, wherein  
15 different scramble systems are applied to the information signal according to combinations of the scramble systems of information signal recorded onto the recording medium and the copy control information signals.

20 30. The reproduction apparatus according to claim 29, wherein the scramble system applied to the information signal when reproduction is executed from the recording medium to which copy control information for permitting only one copy of the information signal is given, is  
25 different from a scramble system, which is applied to the information signal when the reproduction is executed from the recording medium onto which the information signal with copy control information for

